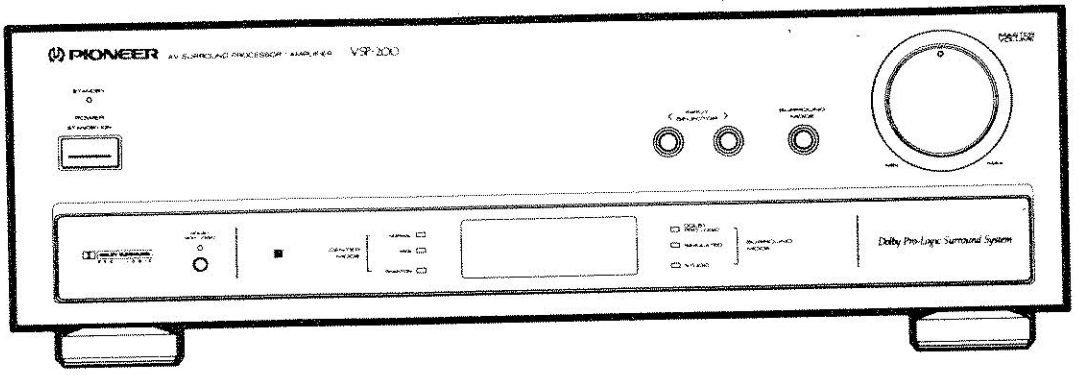
Operating Instructions

AV SURROUND PROCESSOR/AMPLIFIER

VSP-200



Thank you for buying this Pioneer products.
Please read through these Operating Instructions so you will know how to operate your model properly.After you have finished reading the instructions,put them away in a safe place for future reference.
In some countries or regions,the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings.However,the method of connecting and operating the unit is the same.

WARNING:TO PREVENT FIRE OR SHOCK HAZARD,DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

"This product complies with the Radio interference requirements of the EC (European Community) Directive 87/308/EEC."

IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT

FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accodance with the following code:

blue	neutral
brown	live

If the plug provided is unsuitable for your socket outlets, the plug must be cut off and a suitable plug fitted.

The cut-off plug should be disposed of and must not be inserted into any 13 amp socket as this can result in electric shock. The plug or adaptor or the distribution panel should be provided with 5 amp fuse. As the colours of the wires in the mains lead of this appliance may not correspond with coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Do not connect either wire to the earth terminal of a three pin plug.

NOTE
After replacing or changing a fuse, the fuse cover in the plug must be replaced with a fuse cover which corresponds to the colour of the insert in the base of the plug or the word that is embossed on the base of the plug, and the appliance must not be used without a fuse cover. If lost, replacement fuse covers can be obtained from your dealer.

Only 5 A fuses approved by B.S.I. or A.S.T.A. to B.S. 1362 should be used.

PIONEER®

The Art of Entertainment

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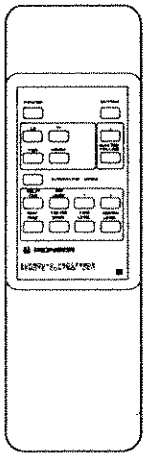
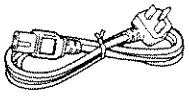
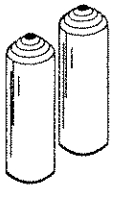
ACCESSORY ITEMS



Remote control unit



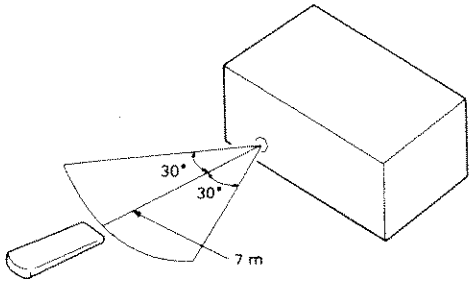
Power cord



Dry cell batteries
(size AA"(R6P/SUM-3))

REMOTE CONTROL RANGE

When operating the remote control unit,point the front of the unit at the front panel of the processor.The remote control unit may be used within a range of about 7 meters from the remote sensor,within angles of up to about 30 degrees. Performance of the remote control unit is adversely affected in the presence of strong fluorescent light.Keep such lights away,especially from the sensor window.



Battery Replacement

As battery power runs down, the range over which the remote control unit can operate decreases.When the range becomes too short,change the batteries.

LOCATION

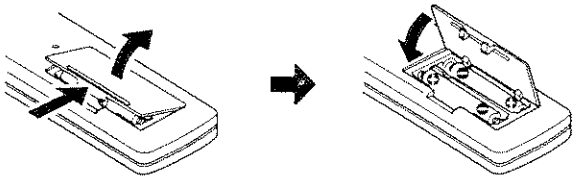
Install the amplifier in a well-ventilated lacation where it will not be exposed to high temperatures or humidity.
Do not install the amplifier in a location which is exposed to direct rays of the sun,or near hot appliances or radiators.Excessive heat can adversely affect the cabinet and internal components.Installation of the amplifier in a damp or dusty environment may result in a mulfunction or accident(Also avoid installation near cookers,etc.,where the amplifier may be exposed to smoke,steam,or heat).

CONDENSATION

When rhe unit is brought into a warm room from previously cold conditions or when the room temperature is suddenly increased,condensation may from inside and the unit may not be able to attain its full performance.
In case like this,allow the unit to stand for about an hour or raise the room temperature gradually.

PUTTING BATTERIES INTO THE REMOTE CONTROL UNIT

1. Open the battery compartment cover on the rear of the remote control unit.the cover should open easily if you side it in the direction of the arrow while pressing on it with your thumb.
2. Take out the two supplied batteries size AA"(R6P),and insert them into thebattery compartment in accordance with the indications in the compartment.
3. Close the cover of the battery compartment.



Incorrect use of batteries may lead to leakage or rupture.Al ways be sure to follow these guidelines:

A.

Always insert ba tteries into the battery compartment correctly matching the positive (+)and negative(-)polalities,as indicated inside the compartment.

B.

Never mix new and used batteries.

C.

Batteries of the same size may have different voltages, depending on their type.Do not mix different types of batteries.

SURROUND EFFECT

This unit has a built-in surround processor for adding presence and an expansive effect to the sound.

• STUDIO:

Select this position to enjoy the effect of listening to music in a recording studio.The source sound is output as it is through the front speakers,with reverberation output through the rear speakers.This is particularly suitable for a source that has a lot of reverbelation.

• SIMULATED SURROUND:

The "SIMULATED SURROUND" creates effects of reverberated and reflected sound from the walls and ceiling similar to a concert hall.These sound-effects added to the actual sound from the source make you feel as if you were in a more expanded space.The different anges of the expanded space can be set by the DELAY TIME button on the remote control unit.

Set the delay time to15ms or 20ms for a live-house concert.For chamber music,set to 20ms.For orchestral music,set to 30ms.The "SIMULATED SURROUND"also gives effects on monaural sources by outputting the reverberated sound from rear speakers while keeping the output sound from front speakers as it is.Turn on the "SIMULATED SURROUND" for a monaural source to gain effective surround playback.

• DOLBY*PRO LOGIC SURROUND:

Choose this setting for movies and music(especially Video Discs and video tapes bearing the DOLBY SURROUND mark)playback.

DOLBY PRO LOGIC SURROUND continuously detects the size and direction of the dominant signal and cancels undesirable crosstalk,thereby providing signal emphasis.

It makes you clearly perceive the directions where the music comes from.real flow of sound can also be re-created naturally using this feature.You can feel as if being in an outstanding and expansive sound field.

When using DOLBY PRO LOGIC SURROUND ,a delay time setting of 20ms is commonly used.Use a different setting if you prefer.

Even if they do not bear the DOLBY SURROUND mark,some video recordings may be Dolby Surround encoded.

Choose the SIMULATED SURROUND mode if the source sound signal is mono.Little or no sound will be heard from the surround speakers if the STUDIO or DOLBY PRO LOGIC SURROUND mode is selected.

With DOLBY PRO LOGIC SURROUND,monaural source sound will be heard only from the center channel at settings other than the PHANTOM position.

Note:

Dolby Surround will not operate correctly if the signal passes through a graphic equalizer.

When using Dolby Surround,set the graphic equalizer for flat response or to its "through"(or off)setting,if you have one in use.

*

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DOLBY 3CH LOGIC

Combining the rear speaker signal with that of the front speakers results in you being able to enjoy a regenarated sound field which has comparatively more presence and a more expansive feeling from the front 3channels(front L,frontR,and center speakers)than that of ordinary stereo regeneration.

DOLBY PRO LOGIC SURROUND,DOLBY 3CH LOGIC CENTER MODE

[For DOLBY PRO LOGIC SURROUND and DOLBY 3CH LOGIC]

You can choose from the following settings:

Center Mode Choices:

When using a center speaker:

•**NORMAL**-Low range frequencies,which have little effect on directionality and positioning,are routed to the left and right front speakers.So you can use a relatively small size speaker as the center speaker.

•**WIDE**-If you use a large size center speaker,choose this setting.The full frequency range of the Dolby Surround center channel,from low to high,is routed to the center speaker.

When not using a center speaker:DOLBY PRO LOGIC SURROUND only

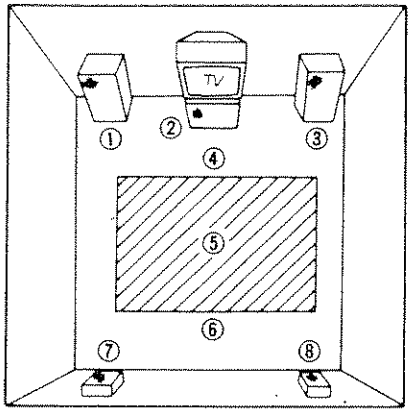
•**PHANTOM**-The signal which would have been sent to the center speaker is divided equally between the left and right front speakers.

SPEAKER INSTALLATION

Speaker Installation Example for Surround

To get the most out of the surround system,place the speakers as shown below.

An example of speaker location



① Front left speaker
② Center speaker
③ Front right speaker
④ FRONT
⑤ Listening area
⑥ REAR
⑦ Rear left speaker
⑧ Rear right speaker

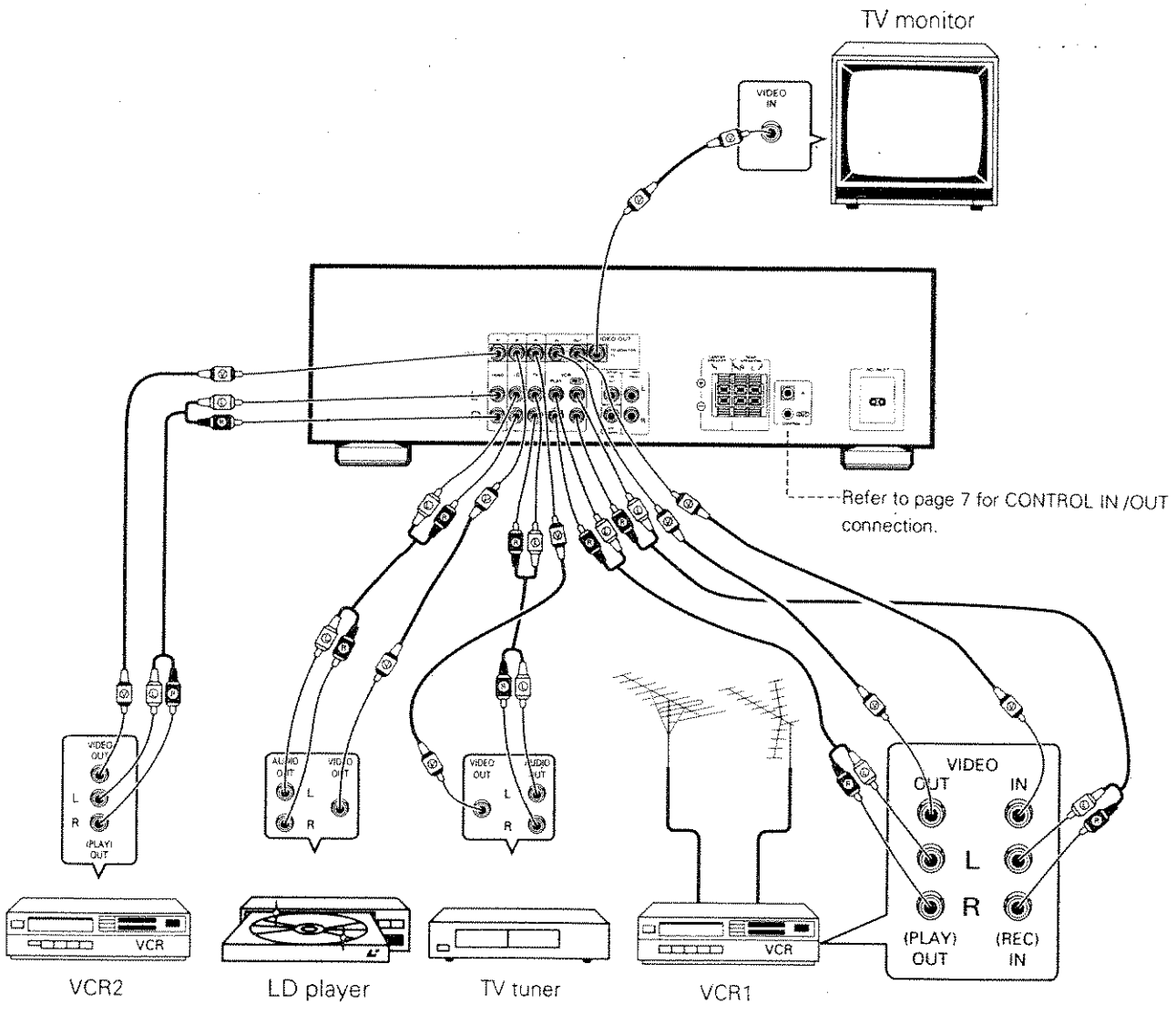
If the rear speakers are positioned at an extreme distance, the surround level will be unable to adjust and the surround effect will not be fully achieved.

NOTE:

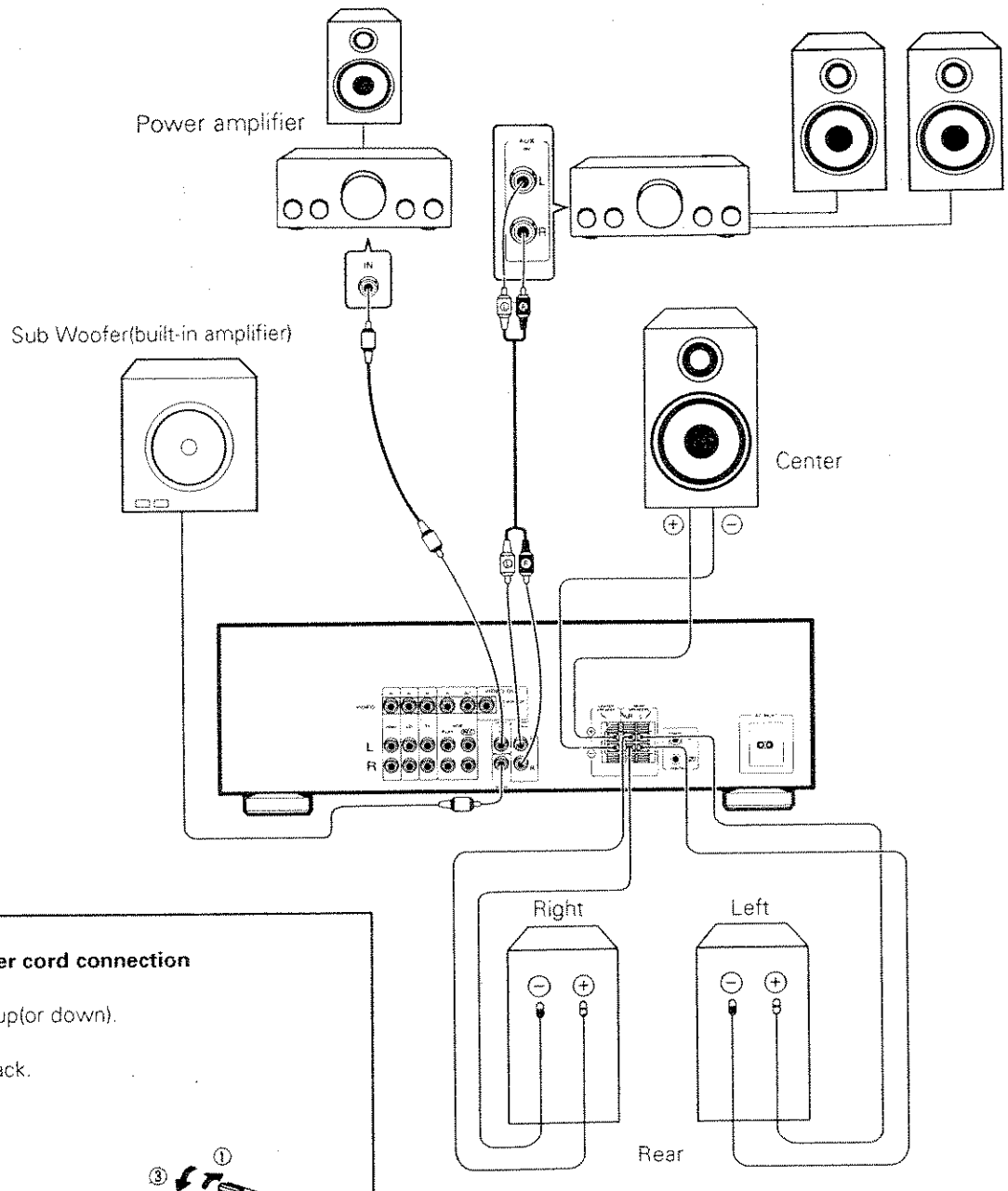
- *To avoid interference with the picture on a nearby TV set,use magnetically shielded speaker systems.This is particularly important for the center speaker since it is usually located closest to the TV.*
- *Position the left and right channel speakers at equal distances from the TV set and approximately 2 meters from each other.*
- *Position the center speaker above,below,or behind the TV set.Sound may not appear to coincide with the picture if you position it next to the TV set.*
- *Rear speakers are best positioned slightly above ear level.*

CONNECTIONS

AUDIO/VIDEO CONNECTIONS

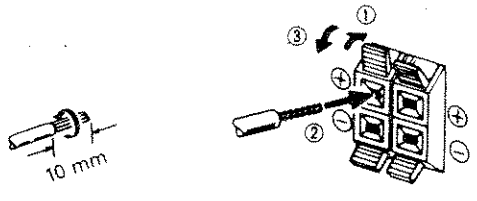


SPEAKER CONNECTIONS



Center/rear speaker cord connection

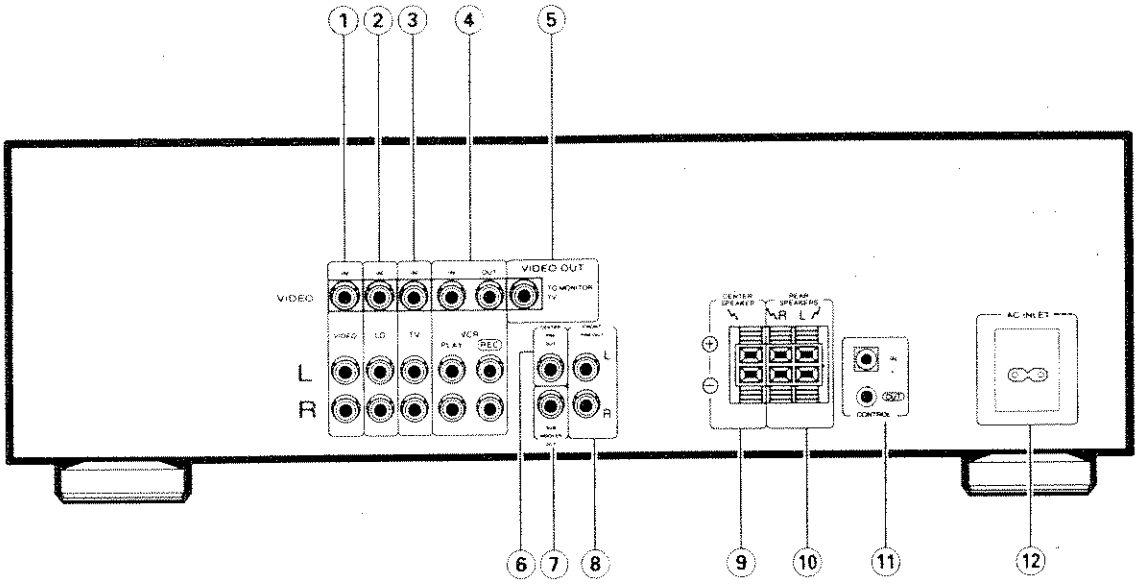
① Push the lever up(or down).
② Insert the cord.
③ Pull the lever back.



NOTE:

- *For the center and rear speakers, use speaker systems having impedance of 8Ω to 16Ω.*
- *Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.*

REAR PANEL FACILITIES



① **VIDEO input jacks**
Connect to visual appliance's output jacks(audio,video).

② **LDinput jacks**
Connect to LDplayer's output jacks(audio,video).

③ **TV input jacks**
Connect to TV tuner's output jacks(audio,video).

④ **VCR jacks**
Connect to a VCR.

⑤ **VIDEO OUT(TO MONITOR TV)jack**
Connect to a monitor TV.

⑥ **CENTER PRE OUT jack**
When using the center speaker with another amplifier,connect this to the amplifier's audio input.And when using the TV's built-in speakers as the center speaker,connect this to the TV's audio input.

⑦ **SUB WOOFER OUT jack**
If you want to boost the low frequencies,or you want to use the unit in a 3D system,connect this to a sub woofer power amplifier.

⑧ **FRONT PRE OUT jacks**
When a separate power amplifier is used to drive the front speakers,connect the power amplifier to these jacks.

⑨ **CENTER SPEAKER terminals**
Connect the center speaker to these terminals.Use center speaker with impedance of 8Ω to16Ω.

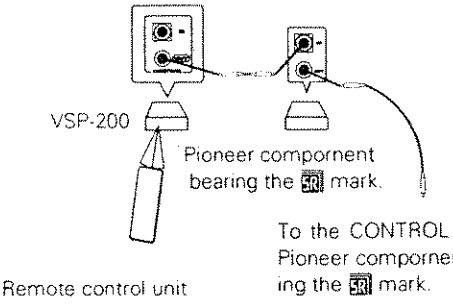
⑩ **REAR SPEAKERS terminals**
Connect the rear speakers to these terminals.Use rear speakers with impedance of 8Ω to16Ω.

⑪ **CONTROL IN/OUT jacks**

IN: Connect this jack to other Pioneer components(main unit or remote control unit) when using those components to control this out.

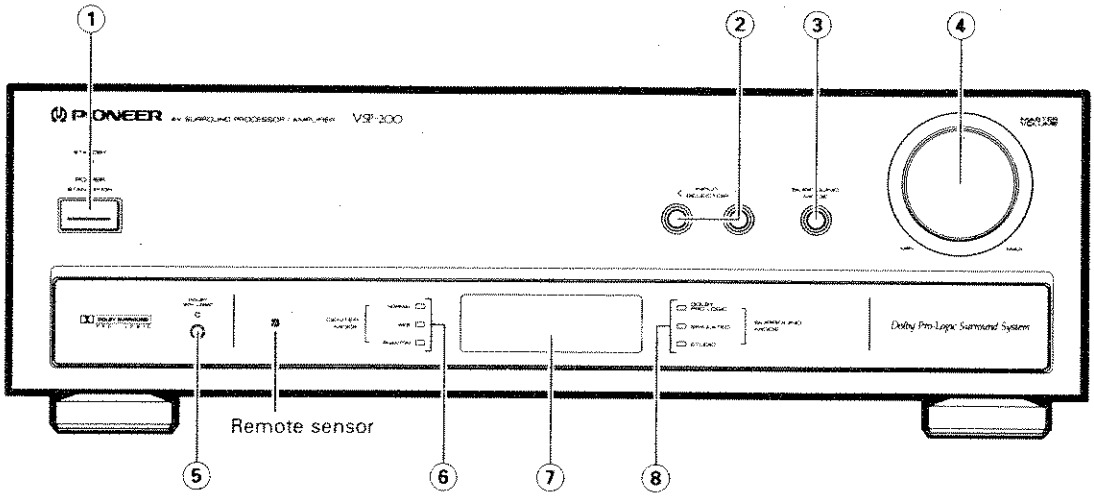
OUT: Connect this jack to other Pioneer components when using the remote control of this unit to control other components.

NOTE:
The VSP-200's remote sensor does not function when a plug is inserted in the IN jack.To operate,point the remote control unit at the remote sensor on the compornent to which the VSP-200's IN jack is connected.



⑫ **AC INLET**
Connect power cord to here and on AC outlet of an audio timer.If you are going to be away from home a long period of time,disconnect the unit from wall socket.

FRONT PANEL FACILITIES



① POWER STANDBY/ON switch/STANDBY indicator
This is the switch for electric power.

ON: When set to the ON position,power is supplied and the unit becomes operational.

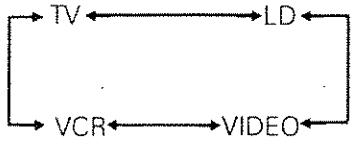
STANDBY: When set to STANDBY position,the main power flow is cut and the unit is no longer fully operational.A minute flow of power feeds the unit to maintain operation readiness.

The STANDBY indicator light when the power is STANDBY,and goes out during ON.

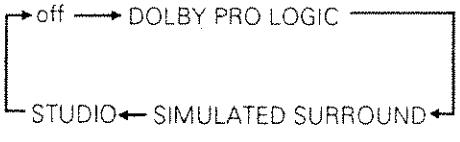
[Timer ON/OFF possible]
When the unit is switched ON,ON/OFF control can be performed by means of the optional timer.

NOTE:
When the power is intially turned ON,muting will be applied to prevent sound from being output for about 6 seconds.

② INPUT SELECTOR buttons
Each time these buttons are pressed,the function changes in the following sequence:



③ SURROUND MODE button
Each time this button is pressed,the surround mode changes in the following sequence:



④ MASTER VOLUME control
After adjusting the volume level on the amplifier you are using,adjust volume to the same level with this MASTER VOLUME control.

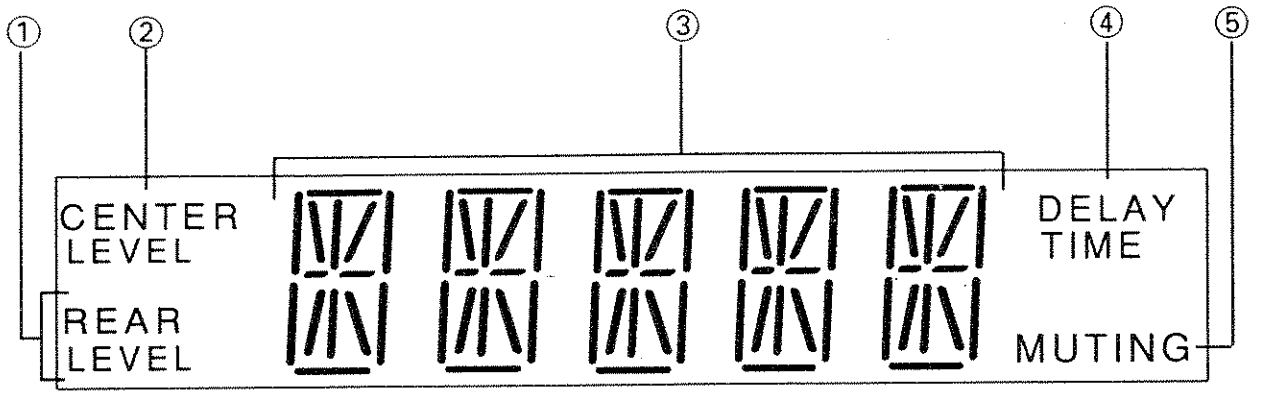
⑤ DOLBY 3CH LOGIC button
Use it to change DOLBY 3CH LOGIC to ON/OFF position.

⑥ CENTER MODE indicators
(NORMAL,WIDE,PHANTOM)
Lights up when a center mode is selected with the CENTER MODE button of the remote control unit.

⑦ Display section

⑧ SURROUND MODE indicators
(DOLBY PRO LOGIC,SIMULATED,STUDIO)
Lights up when a surround mode is selected with the SURROUND MODE button.

DISPLAY SECTION



① REAR LEVEL indicator
It light the rear level settings during adjustment.
② CENTER LEVEL indicator
It light the center level settings during adjustment.
③ Character/Level display
Displays function,center level,rear level and delay time.

④ DELAY TIME indicator
Lights during SIMULATED SURROUND or DOLBY PRO LOGIC SURROUND(when using a DELAY TIME).
⑤ MUTING indicator
Flashes when MUTING is set to ON.

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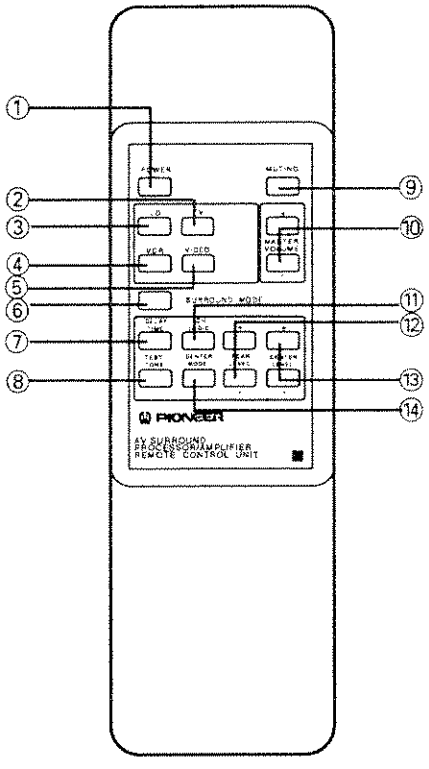
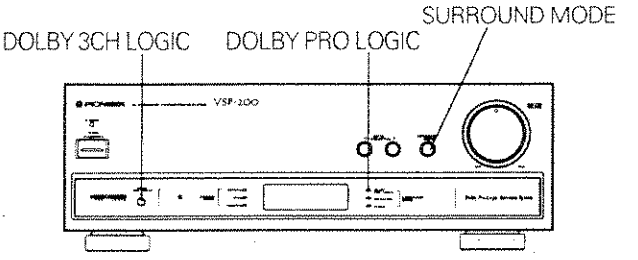
REMOTE CONTROL UNIT FACILITIES



① POWER button
② TV button
③ LD button
④ VCR button
⑤ VIDEO button
⑥ SURROUND MODE button
⑦ DELAY TIME button
⑧ TEST TONE button
⑨ MUTING button
⑩ MASTER VOLUME(+/-)buttons
⑪ 3CH LOGIC button
⑫ REAR LEVEL(+/-)buttons
⑬ CENTER LEVEL(+/-)buttons
⑭ CENTER MODE button

DOLBY PRO LOGIC SURROUND AND DOLBY 3CH LOGIC

Use DOLBY PRO LOGIC SURROUND when rear speakers are connected,and DOLBY 3CH LOGIC when rear speakers are not connected.
For correct surround reproduction,be sure to perform following adjustments.
•The surround effect is better when using video and audio software bearing the DOLBY SURROUND mark.



LEVEL ADJUSTMENT

1. **Use SURROUND MODE button to select DOLBY PRO LOGIC SURROUND or use the DOLBY 3CH LOGIC button to switch DOLBY 3CH LOGIC ON.**
2. **Adjust MASTER VOLUME to suitable listening level.**
3. **Press the CENTER MODE button on the remote control unit.**
   •DOLBY PRO LOGIC SURROUND;
   NORMAL,WIDE,PHANTOM
   •DOLBY 3CH LOGIC;NORMAL,WIDE
4. **Press the TEST TONE button on the remote control unit.**
5. **Use the CENTER LEVEL(+/-)buttons and REAR LEVEL(+/-)buttons to adjust center and rear speaker volume levels until they are the same as the front speaker's volume level.**
6. **Press the TEST TONE button on the remote control unit and switch the test tone to off position.**

OPERATION

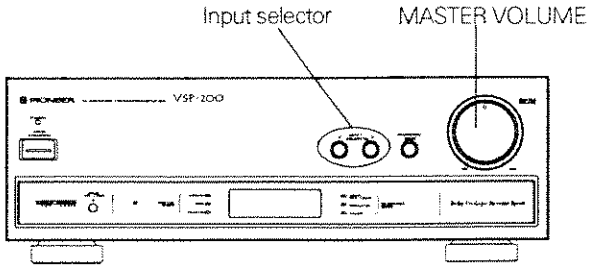
1. **Select DOLBY PRO LOGIC SURROUND with the SURROUND MODE button or select DOLBY 3CH LOGIC with the DOLBY 3CH LOGIC button.**
2. **Select the component for playback with the input selector buttons.**
3. **Select CENTER MODE with the CENTER MODE button on the remote control unit.**
4. **Begin playback.**
5. **Adjust volume level with the MASTER VOLUME control.**

SETTING THE DELAY TIME

When using DOLBY PRO LOGIC SURROUND,you can set the delay time between 15ms and 30ms.The standard setting is 20ms,but you can select any setting of your choice. Delay time changes each time you press the DELAY TIME button.The delay time is indicated in the display section.

OPERATING THE CONNECTED COMPONENTS

Press the POWER switch to the ON position,and turn on the power to the other components you wish to use(for example,TV,LD player,VCR,etc.).



PLAYBACK

1. **Use the input selector buttons to select the desired program source.**

Program Source	Input Selector
To playback on a VIDEO	VIDEO
To watch a Laser Disc	LD
To watch a TV	TV
To playback on a VCR	VCR

2. **Operate the appropriate video component to playback the program source.**
   - For a video source,switch the TV connected to this unit to the video input mode.
3. **Adjust the MASTER VOLUME control as desired.**
   - Refer to pages 11 for details concerning surround operation.

TROUBLE SHOOTING

Incorrect operations are often mistaken for trouble and malfunctions.If you think that there is something wrong with this component,check the points below.Sometimes the trouble may lie in another component.Inverstigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below,ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
Power does not come on even when POWER switch is pressed.	•Power cord is disconnected. •Instances are rare,but the ploblem may be due to the operation of the protector circuit.	•Connect cord securely. •Unplug the power cord of the unit from the AC wall outlet,then plug it in again.
Control was not possible regardless of what operation button was pressed.	•Static electrcity affected the unit when the air was dry,such as in winter.	•Unplug.the power cord of the unit from the AC wall outlet,then plug it in again. •If static electricity is pronnounced,it is recommended that you operate the unit using the remote control unit.
No sound or picture are produced,even when the INPUT SELECTOR button is selected.	•Connections are incorrect. •VOLUME is turned down.	•Consult pages 5-7 and perform connec tions correctly. •Raise volume.
	•Speaker connecting wires are disconnected from speaker terminals.	•Connect wires to terminals securely.
	•One or both of the input cords are disconnected.	•Connect input cords securely.
High noise level.	•Noise being picked up from this unit and other equipment(especially electrical appliances using motors or fluorescent lights). •MUTING is on,and the MASTER VOLUME level is high.	•Stop using appliances generating noise or remove them from vicinity of the stereo equipment. •Switch MUTING off.
TVsource cannot be seen when the VCR's TV tuner is used.	•TVantenna is not connected to VCR,or connections are faulty.	•Consult the VCR's operating instructions,and connect antenna correctly.
	•You are attempting to watch a TV source using a VCR with copy system connections. In general,when copy system connections are made,the VCR's TV tuner function ceases to operate.For details,consult the operating instructions of your VCR.	•Disconnect the copy system connection (TV tuner function will operate).
No rear sound is produced.	•The SURROUND MODE selector button is set incorrectly. •The REAR LEVEL is turned down. •Speaker connecting wires are disconnected from REAR SPEAKERS terminals.	•Set correctly. •Adjust the rear level with the remote control unit's REAR LEVEL button. •Connect wires to terminals securely.
Remote control does not work.	•Batteries are dead or no batteries in remote control unit. •Poor angle or too great a distance from the remote sensor window. •There is an obstacle between you and the remote sensor window. •A fluorescent light is shining on the remote sensor window.	•Insert new batteries. •Using with 7 meters and within 30 degrees angle of the remote sensor window. •Change your position or move the obstacle. •Move so fluorescent light does not shine directly on amplifier's front panel remote sensor window.

Abnormal functioning of this unit may be caused by lighting,static electricity,or other external interference.To restore normal operation,turn the power off and then on again,or unplug the AC power cord and then plug it in again.

SPECIFICATIONS

Amplifier section

Continuous Power Output(DIN)(When using SURROUND MODE)
Rear only driven ..... 20w+20w(1kHz,1.0%,8Ω)
Center driven
Only with DOLBY PRO LOGIC SURROUND 50W (1kHz,1.0%,4Ω)
Input(Sensitivity/Impedance)
LD,VIDEO,VCR,TV 200mV/47kΩ
Frequency Response
LD,VIDEO,VCR,TV ..... 10Hz to 100kHz $^{+0}_{-3}$dB
Output(Level/Impedance)
FRONT PREOUT,CENTER PREOUT,SUB WOOFER OUT 1V/2.2kΩ
VCR REC 200mV/2.2kΩ
Signal-to-Noise Ratio(IHF,short circuited,A network)
LD,VIDEO,VCR,TV 102dB
MUTING ..... -20dB

VIDEO section

Input(Sensitivity/Impedance)
VIDEO,TV,VCR,LD 1Vp-p/75Ω
Output(Level/Impedance)
VCR,MONITOR 1Vp-p/75Ω
Frequency Response
VCR,TV,VIDEO,LD→MONITOR ..... 5Hz to 10 MHz $^{+0}_{-3}$dB
Signal-to-Noise Ratio 63dB
Cross Talk 55dB

Miscellaneous

Power Requirements ..... a.c. 240 Volts,50/60Hz
Power Consumption 250W
Dimensions ..... 420(W) x140(H) x 295(D)mm
Weight(without package) 5.1kg

Furnished Parts

Dry Cell Batteries size"AA"(R6P) 2
Remote Control Unit 1
Power Cord 1
Operating Instructions 1

NOTE:

Specifications and the design are subject to possible modifications without notice,due to improvements.

MAINTENANCE OF EXTERNAL SURFACE

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty,wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water,and wrung out well,and then wipe again with a dry cloth.Do not use furniture wax or cleansers.
- Never use thinners,benzine,insecticide sprays or other chemicals on or near this unit,these will corrode the surfaces.

POWER -CORD CAUTION

Handle the power cord by the plug.Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock.Do not place the unit,a piece of furniture,etc.,on the power cord,or pinch the cord.Never make a knot in the cord or tie it with other cords.The power cords should be routed such that they are not likely to be stepped on.A damaged power cord can cause fire or give you an electrical shock.Check the power cord once in a while.When you find it damaged,ask your nearest PIONEER authorized service center or your dealer for a replacement.

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